

Application No.: 10/501,130  
Filed: July 12, 2004  
TC Unit: 1641  
Confirmation No. 5628

REMARKS

The Examiner's recitation of the Status of the Claims is acknowledged. Applicants reserve the right to pursue any non-elected claims in future filed continuing applications.

Answer to Point 9

Examiner Srivastava, newly assigned to this application, states that the Applicants' inclusion within Group I of "the subject matter claimed in withdrawn Claim 15," as a dependent claim (claim 24), is improper. The Applicants strongly contest this analysis and the Examiner's interpretation of the Applicants' previously submitted remarks. New claim 24 as written, by being dependent on claim 1, incorporates all of the limitations of claim 1. The additional limitations actually added in new claim 24 merely relate to the form of the carrier layer and the screening layer, what the Applicants called "the primary limitations of claim 15" in the previously submitted remarks. Thus, new claim 24 does not comprise limitations that are different from the subject matter claimed in Claim 1; these limitations merely define and constitute a subset of Claim 1, as any properly constituted dependent claim does.

Therefore, Applicants respectfully request full inclusion within Group I of Claims 16-20 and 24-25.

Answer to Point 10

In addition, the Examiner has imposed a Supplemental Restriction Requirement, stating that Subgroup I: Claims 1-5 and 9; Subgroup II: Claims 1 and 6-8; and Subgroup III: Claims 1 and 10-14 "are not so linked as to form a single general inventive

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concept" and are "drawn to three different compositions." The Applicants also strongly contest this analysis. The Examiner appears not to be applying properly either the principle of dependent claim structure (a dependent claim includes all of the limitations of the claim from which it depends and adds one or more additional limitations to those in the independent claim) or the principle of claim differentiation (an independent, or "dominant," claim must be broader in scope than a dependent, or "subservient," claim and will read upon everything that the narrower or subservient claim reads upon and more).

If Claim 1 is properly analyzed, it can be seen to include within its scope an immobilized catalytic system comprising:

(1) a carrier layer that includes a catalytic entity mixed with a neutral or anionic carrier polymer, which may be cross-linked (according to the limitations of Claims 6-8) or not (if Claims 6-8 are not applied); and

(2) a screening layer over the carrier layer, the screening layer comprising a matrix of a cationic polymer, which may be cross-linked (according to the limitations of Claims 10-14) or not (if Claims 10-14 are not applied).

Whether or not the polymers in the respective layers are cross-linked relates only to which embodiment is being defined, not to "functionality" as the Examiner stated. All three of the "groups" identified by the Examiner are drawn to "immobilized catalytic systems" that are required to have the same functionality. In other words, in all of the different permutations - (a) neither layer having a cross-linked polymer, (b) the carrier layer having a cross-linked polymer or (c) the screening layer having a cross-linked polymer - the following

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"functions" must be present: the cationic polymer matrix must be permeable to molecules processed by, produced by or acted upon by the catalytic entity but not permeable to the catalytic entity itself, and any counter ion to the neutral or anionic carrier polymer must not be the cationic polymer and any counter ion to the cationic polymer must not be the neutral or anionic carrier polymer.

Thus, Applicants submit that this further restriction is improper. If the Examiner continues to maintain this restriction, Applicants elect, with traverse, the claims of Subgroup I (Claims 1-5 and 9). Furthermore, in regards to Species Election, for the purpose of examination Applicants elect within Subgroup I: whole cells as the catalytic entity (Claims 1-5 and 9 are readable thereon); polycarboxylic acid, specifically alginate, as the anionic carrier polymer (Claims 1-5 and 9 are readable thereon); and chitosan and other water-soluble chitin derivatives as the cationic carrier polymer (Claims 1-5 and 9 are readable thereon).

The Applicants submit that all of Claims 1-15, 16-20 and 24-25 are in condition for allowance, and such action is respectfully requested.

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The Examiner is encouraged to telephone the undersigned attorney to discuss any matter that would expedite allowance of the present application.

Respectfully submitted,

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